

September-13-12 11:22:34 AM

Item ID: D212-580-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Cargo Mirror Assembly, 8 inch Round

Stop *NS2*

Start Date: 9/13/12 **Start Qty:** 100 ***1***

Cust Item ID:

Required Date: 10/05/12 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12-09-14 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2161	B2
IIN-D212-580-1	A

100

100

DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile and create labels as per PPP D212-580-041 CHG004

0.00

0.00

0.00

0.00

160

160

Packaging

Packaging

Pick Kit

Memo

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 90060

90060

Page 2

September-13-12 11:22:34 AM

Item ID: D212-580-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Cargo Mirror Assembly, 8 inch Round

Start Date: 9/13/12 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 10/05/12 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC4- 100% Inspect kits for completeness	0.00							
170									
QC	Memo	0.00							
Quality Control									
180	Packaging	0.00							
180									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 0212--580-041 Location: 16011 PPP Rev: A								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

13-1-17

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
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Supplier <input type="checkbox"/>												
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FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Picklist Print

September-13-12 11:22:34 AM

Page 1

Work Order ID: 90060

Parent Item: D212-580-041

Parent Item Name: Cargo Mirror Assembly, 8 inch Round

Start Date: 9/13/12

Required Date: 10/05/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:H Removed D2013-3/-4 06-03-22 JLM
IPP REV:I AS PER ECN10-611 10-09-07 JLM VERIFIED
BY:DD
642 DD VERF:JLM

IPP rev:J 10.11.22 AS PER ECN10-

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3439-101 Mirror Assembly 8"		Manufactured	No			100	Each	19.0000	2	24	8P		SP
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST229		19							
				82773		19							
D2161-212 Mirror Bracket, 212		Manufactured	No			100	Each	0.0000	1	4x	12	394024	SP
MS20426AD3-4 RIVET		Purchased	No			100	Each	7,410.0000	8	8/16	8P		SP
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				333		4000							
				122452		4000							
				ST316		410							
				104374		236							
				110398		174							
				ST334		3000							
				123021		3000							
D4164-041 Nut Plate Adapter Assembly		Manufactured	No			100	Each	56.0000	4	16x	48	8P13-01-14	SP
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST104		36							
				83422		36							
				ST105		20							
				87347		20							

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
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Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
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Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
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Picklist Print

September-13-12 11:22:34 AM

Page 2

Work Order ID: 90060

Parent Item: D212-580-041

Parent Item Name: Cargo Mirror Assembly, 8 inch Round

Start Date: 9/13/12

Required Date: 10/05/12

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Screw

Purchased

No

100

Each

1,102.0000

SM 2

Location

Loc Qty

Loc Code

308

356

122452

356

ST291

746

117423

73

119075

1

120308

44

121011

43

121243

500

121708

85

8x

SP13-01-14

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

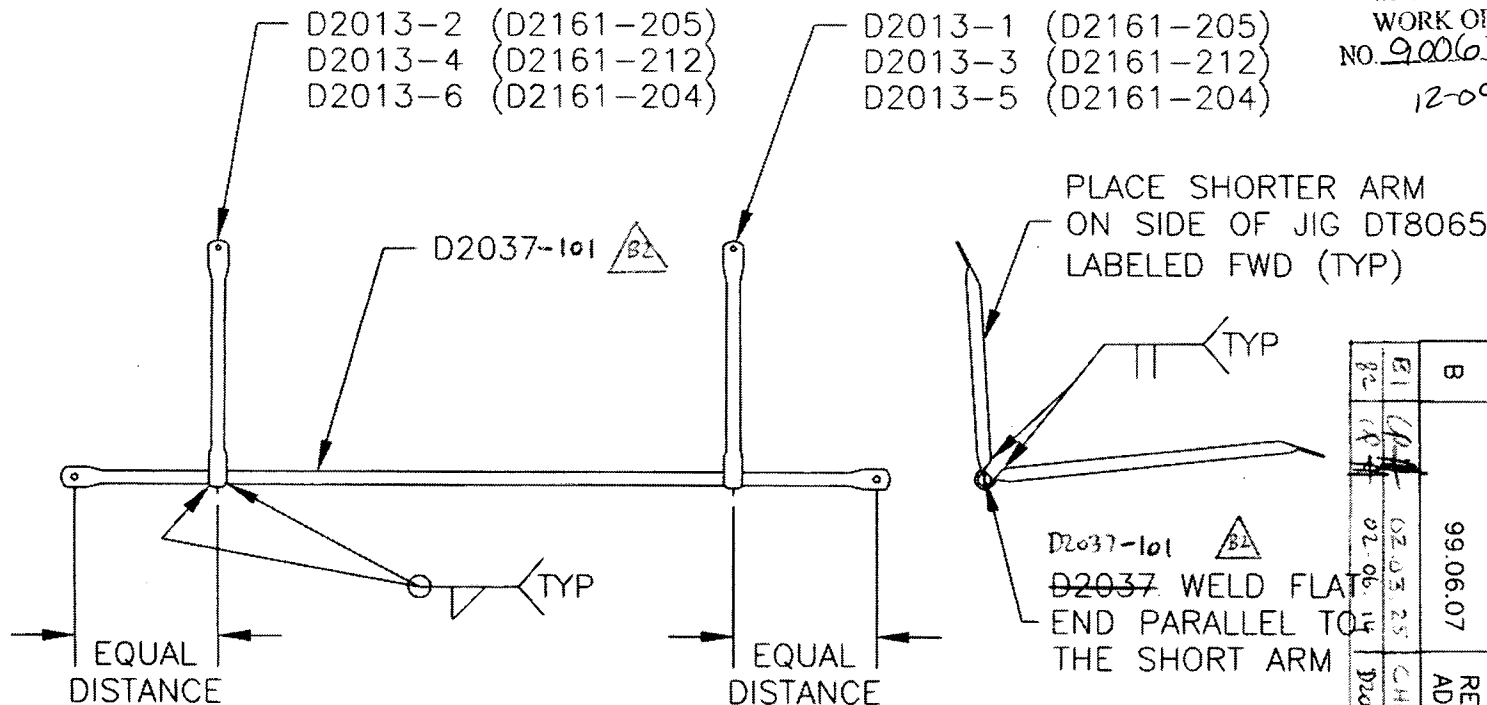
DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
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SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 90060 ML5
 12-09-14

DART



PLACE SHORTER ARM
 ON SIDE OF JIG DT8065
 LABELED FWD (TYP)

D2037-101 B2
 D2037 WELD FLAT
 END PARALLEL TO
 THE SHORT ARM

DETAIL OF D2161-204
 DETAIL OF D2161-205
 DETAIL OF D2161-212

NOTE: WELD ASSEMBLY
 USING JIG DT8065

FINISH: ~~POWDER COAT ASSEMBLY BLACK~~
~~CRINKLE (4.3.5.3) PER DART QSI 005 4.3~~
 POWDER COAT BLACK SANDTEX (4.3.5.7) PER
 DART QSI 005 4.3 B1

DESIGN	DRAWN BY	DART AEROSPACE LTD
JB	RT	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
99.06.07	99.06.07	D2161
DATE	TITLE	SHEET 1 OF 1
99.06.07	MIRROR BRACKET	SCALE
	NEW ISSUE	NTS
	REDRAWN FOR CLARITY	
	ADDED -204/-205/-212 DESIGNATIONS	
	CHANGE FINISH	
	D2037-101 WELD	

RELEASED
 KE 99.06.10

4.0 PARTS LIST

Qty 562 -041	Qty 563 -041	Qty 580 -041	Part Number	Description
X			D204-562-041	DUAL MIRROR INSTALLATION
	X		D205-563-041	DUAL MIRROR INSTALLATION
		X	D212-580-041	DUAL MIRROR INSTALLATION
2	2	2	D3439-101	MIRROR (WAS D2011-103)
1			D2161-204	MIRROR BRACKET
	1		D2161-205	MIRROR BRACKET
		1	D2161-212	MIRROR BRACKET
*2	*2	*2	D3015-3	LOCKNUT
*2	*2	*2	AN960JD516	WASHER
		8	MS20426AD3-4	RIVET, COUNTERSUNK
		4	D4164-041	NUT, PLATE ASSEMBLY
4	4	4	MS27039-1-08	SCREW

* PARTS ARE INCLUDED WITH D3439-101 MIRROR

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Revision: B

Date: 12.06.13